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CONTROL OF BRAKE-AND STEER-BY-WIRE  
SYSTEMS DURING BRAKE FAILURE

ABSTRACT OF THE DISCLOSURE

A method, computer usable medium including a program, and a system for braking a vehicle during brake failure. The method and computer usable medium include the steps of determining a brake force lost corresponding to a failed brake, and determining a brake force reserve corresponding to at least one non-failed brake. At least one command brake force is determined based on the brake force lost and the brake force reserve. The at least one command brake force is applied to the at least one non-failed brake wherein at least one of an undesired yaw moment and a yaw moment rate of change are limited to predetermined values. ~~A steering correction may be determined and applied to counter a yaw moment generated from asymmetric braking based on a predetermined limit.~~ The system includes a plurality of brake assemblies wherein a command brake force is applied to at least one non-failed brake. ~~A controller operably attached to the brake assemblies includes means for determining brake force lost, brake force reserve, and the command force.~~